



## **G. Arthur Cooper - Field Notes, circa 1955**

Extracted on Oct-12-2015 01:35:03

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[[preprinted]] 0842 [[/preprinted]]

1955  
Aug 11. Oklahoma

A11<sup>1</sup> Shale and thin ls beds on east side of road underlying a limestone smashed (as Frensley ls. I think this may be where I collected in 1947. *M. haydenensis* is fairly common. I estimate the Frensley ls to be 0.28 mile south of the bridge over Oil Creek. The Frensley thus is in the NW $\frac{1}{4}$  SE $\frac{1}{4}$  32 - 3S - 4E, Johnston Co.

A11<sup>2</sup> Is the shale just under The Frensley limestone. Abundant *Mesolobus*. This is where I collected in 1947.

A11<sup>3</sup> Is about 1000' SE of road and just above a thin limestone

[[image - pencil sketch of layers including Sp. rocky. and Frensley]]

Aug. 12.

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A12<sup>2</sup> Same 100 yds E of NW cor. 29 - 35 - 2E.

A12<sup>3</sup> 0.1 mile N of road, SW $\frac{1}{4}$  SE $\frac{1}{4}$  4 - 3S - 1E, Carter Co. [[Girty?]] loc. 4035.

A12<sup>4</sup> NW cor 33 - 35 - 1E, Carter Co., Okla Williams

A12<sup>5</sup> O Herville - 600 feet S of NW cor 5 - 6S - 2E, Love Co., Okla.

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Aug. 16.

Four kegs packed at Muskogee, all of Mayes. Keg #4 contains one lot on top half of keg without label. This was collected Aug. 16 in afternoon inside loop of Okla 10 ca 3 1/2 to 4 miles SE of Fort Gibson, about center S 1/2 of NW 1/4 21 - 15N - 20E, Hulbert [[image - square]], Oklahoma.

Beds with big Productid and Centronella very near top of Moorefield. These are underlain by granular ls with large Flexaria and Inflatia like I inflatus of the Chester. These however underlie the big productus bed which has Moorefieldella. Beds with big Spirifer just underlie the Flexaria beds and under these is a layer teeming with Moorefieldella. Under this some distance comes Martinia - big Linoprotuctus bed. Below that the rocks are quite shaly.

Beds with Big Spirifer and terebratulas is just below the Flexaria bed.

Athyrid in Fayetteville on Okla 10 is near base of shale. This near center SE 1/4 NW 1/4 21 - 15N - 20E.

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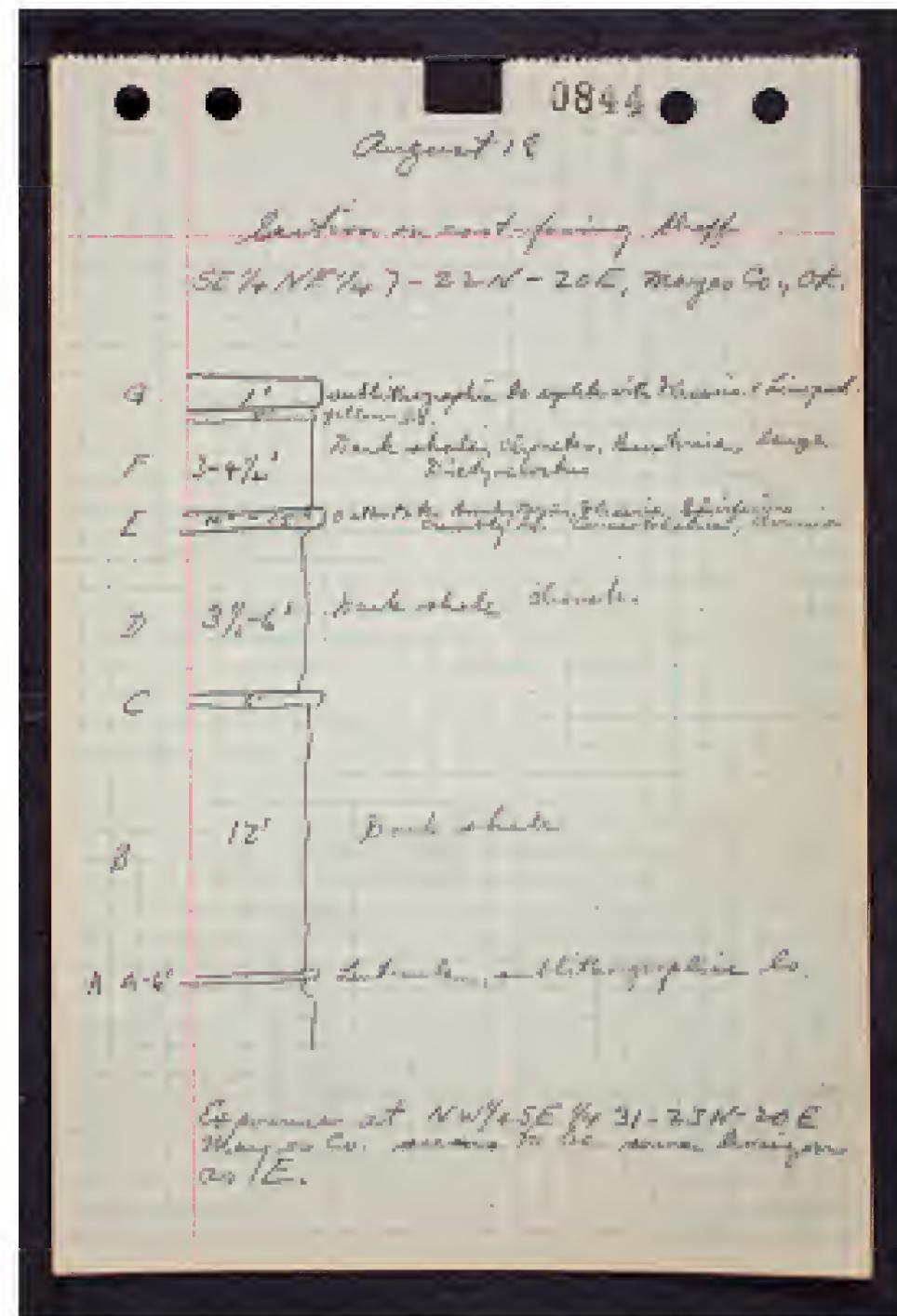
August 18

Section on east-facing bluff  
SE 1/4 NE 1/4 7-22N-20E, Mayes Co., OK.

[[Image: diagram showing a cross section of soil]]

G 1' sublithographic ls replete with Flexaria & Linopod.  
8" yellow ls.  
F 3 - 4 1/2' Dark shale, Chonetes, Buxteria, large Dictyoclostus  
E 10" - 15" Orthotetes, Brachythuria, Flexaria, Spiriferina  
Crumby ls. Camarotoechia, [[Buuisia?]]  
D 3 1/2 - 6' Dark shale Chorettes  
C 6"  
B 12' Dark shale  
A 4- 6" Lenticular, sublithographic ls.

Exposure at NW 1/4 SE 1/4 31-23N-20E Mayes Co. seems to be same  
horizon as E.



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August 18

A1855 - Granular limestone with Archimedes, Diaphragmus, probably Hindsville

1855' Quarry in upper part Hindsville

Camarotoechia common, Perditocardinia rare

SW cor. 15-25N-21E, Craig Co., Okla.

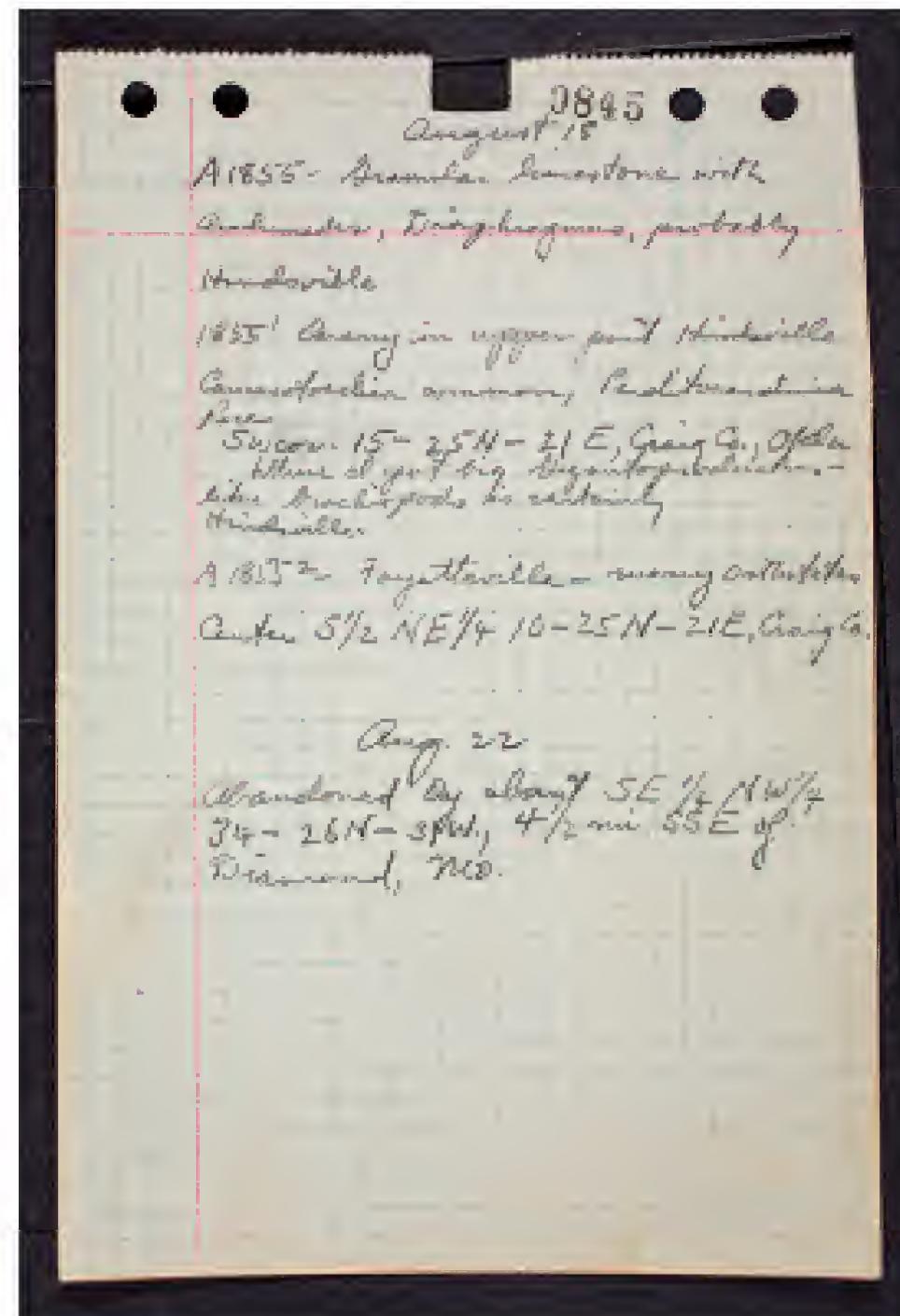
Where I got big Gigantoprotodus-like brachiopods is certainly Hindsville.

A1855 2 - Fayetteville - many Orthotetes

Center S 1/2 NE 1/4 10-25N-21E, Craig Co.

Aug. 22

Abandoned Qy about SE 1/4 NW 1/4 34-26N-31W., 4 1/2 mi. SSE of Diamond, MO.



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August 27

Section at Grand Summit about 1.2 miles NE of Station.

Slabs with interiors of Juresania come on top of limestone capping the Florena (= Morrill ls.) or steams shale.

[[image: diagram of cross section profile of soil]]

Juresania common

thick ls.

Sh & modular ls, level of fossils ls.

sh

ls

Red sh ls.

Sh  
Thick ls.

Aug. 28

Old localiy for silicified Derbyia is 3 1/2 mi N of center of Dexter about center east line 36 - 32S - 6E

First cut from S is 3 mi north of Dexter. Second cut is 3.5 miles N and is one from which most silicified stuff came. Second cut is about 0.1 mi. S of NE 1/4 36 - 32S - 6E

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At Junction Kens. 38 & 15 exposure of flinty limestone = Florence ls. We collected from a shale possibly Blue Spring shale. Just east (downhill) from intersection is road cut with Derbyia cymbula at base. This is in cherty ls., The Wreford and is about 1/4 mile E of Florence chart cut and probably 50' & below it.

0.2 mile W of Elk - Cowley Co. line, good Florena beside road

Just over RR track about 1 mile on US 166 is a poor cut in top Florena. Second cut about 0.2 mi. W and 30' higher is in algae beds same as seen just east of Houses. Derbyia hooserensis must therefore be out of the Florena

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Aug 30  
US 77 about 5 1/2 mi S of Junction City

[[right margin]]  
[[overwritten]] 4  
5 [[marked out]] .0  
9.5

5.5  
[[right margin]]

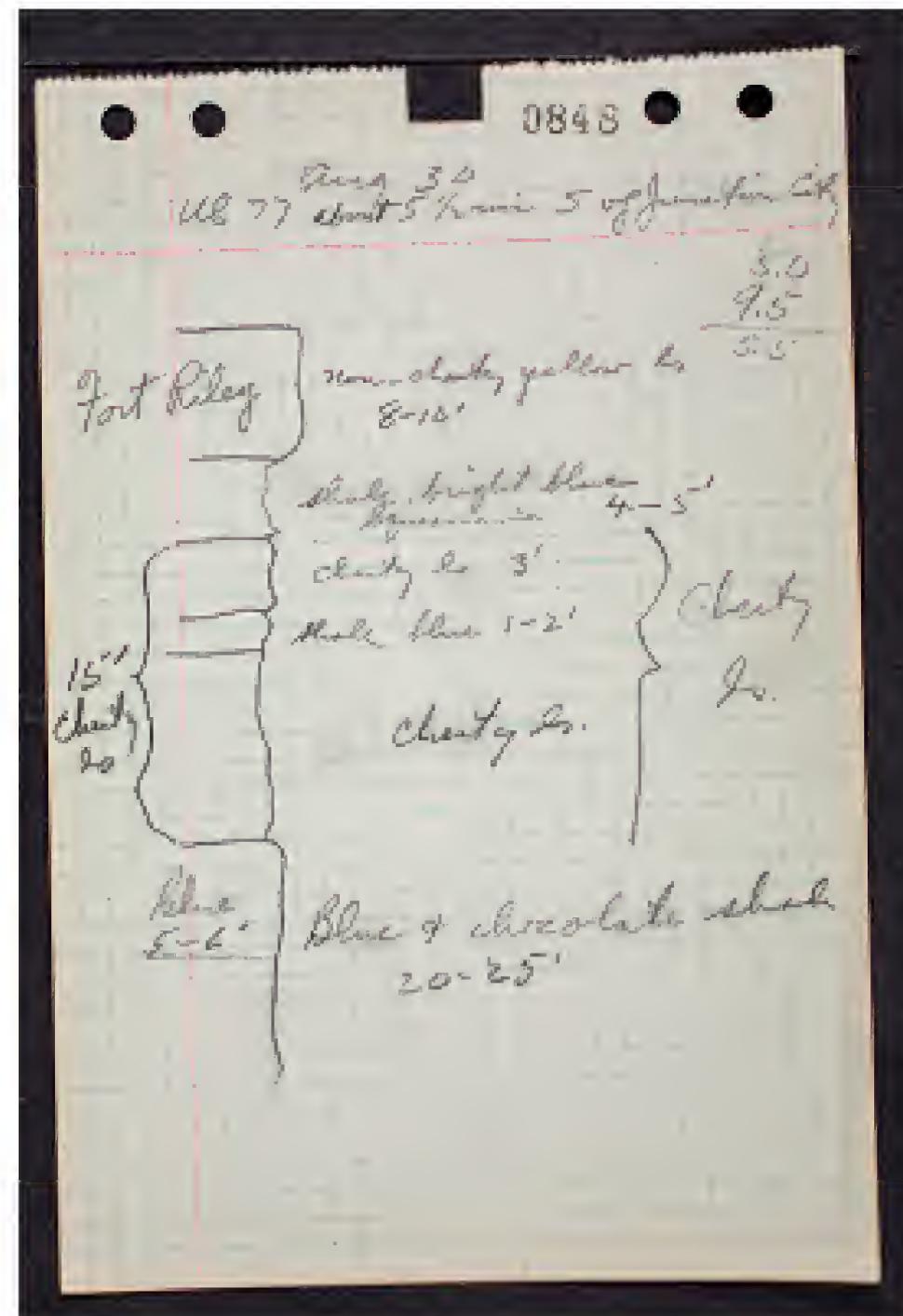
[[image: diagram of cross section showing different shale layers and measurements]]

Fort Riley non-Cherty yellow ls 8-10'

shale, bright blue Squamaria 4-5'

{ Cherty ls 3' }  
15' Cherty ls { Shale blue 1-2' } Cherty ls  
{ Cherty ls }

Blue 5-6' Blue & chocolate shale  
20-25'

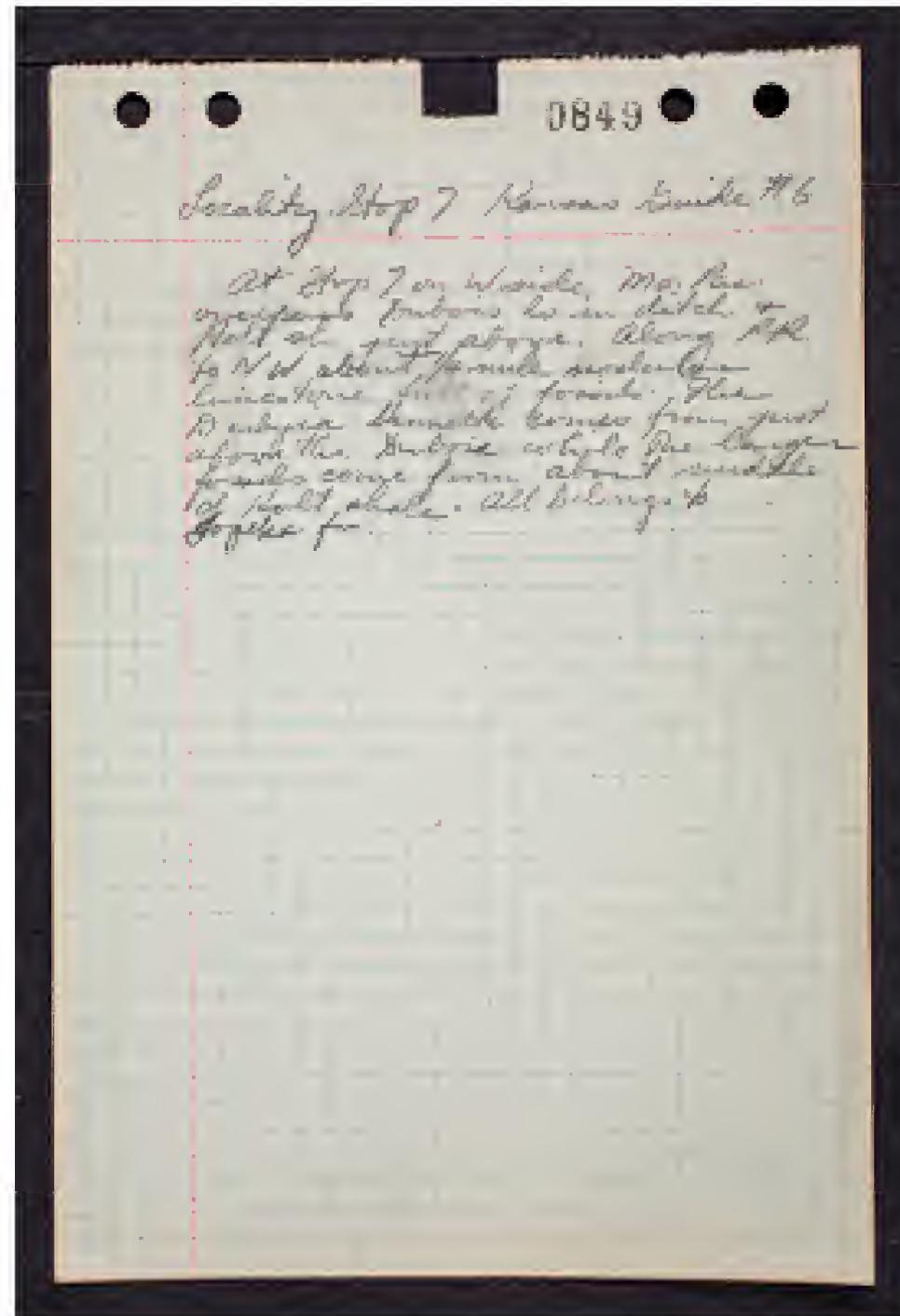


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Locality Stop 7 Kansas Guide #6

At Stop 7 on W side Mo. Pac. overpass Dubois ls in ditch & Holt sh just above. Along RR to NW about 1/4 mile nodules limestone full of fossils. The Derbyia beneath comes from just above the Dubois while the large fossils come from about middle of Holt shale. All belongs to Jobeka fm.



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Sept 5

Section just east of western bend of S bend on US 75 south of Dawson.

[[image: diagram of cross section of layers of soil]]

E Shale 8' Shale with lower 4' full of fossils & thin brown layers of fossils.  
Linoprod., *D. americanis*.

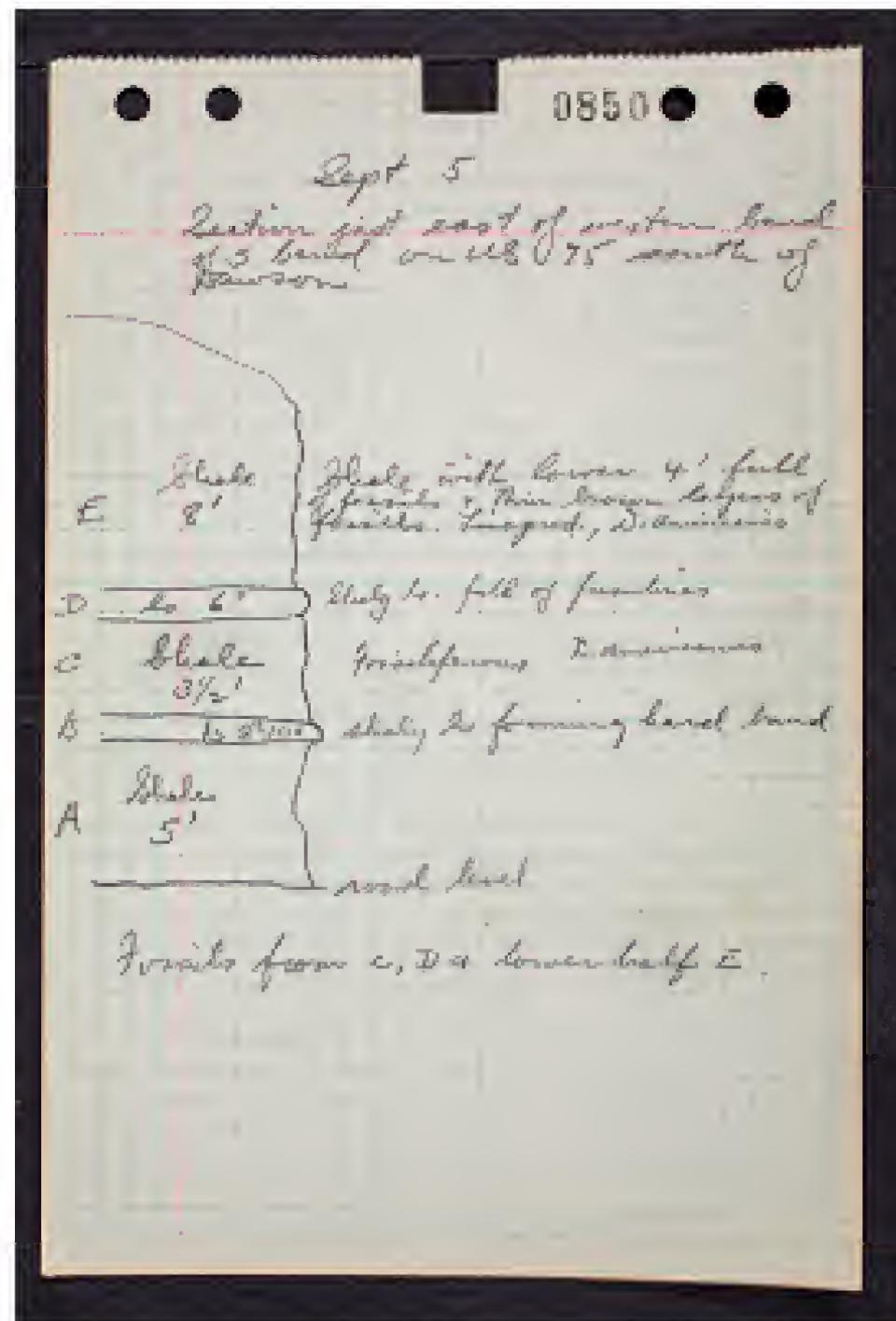
D ls 6" Shaly ls. full of fusulines

C Shale 3 1/2' Fossiliferous *D. americanus*

B ls 8"-10" shaly ls forming hard band

A Shale 5' road level

Fossils from C, D & lower half E.



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Sept. 5.

Qy. 0.2 mile east of junction

US 24 & US 59, N of US 24 about 0.2 mile Hamm's Quarry [[insertion]] ^  
3 miles [[/insertion]] east of Perry. The 5' bed is irregularly bedded, light  
blue when fresh but turns brown on exposure.

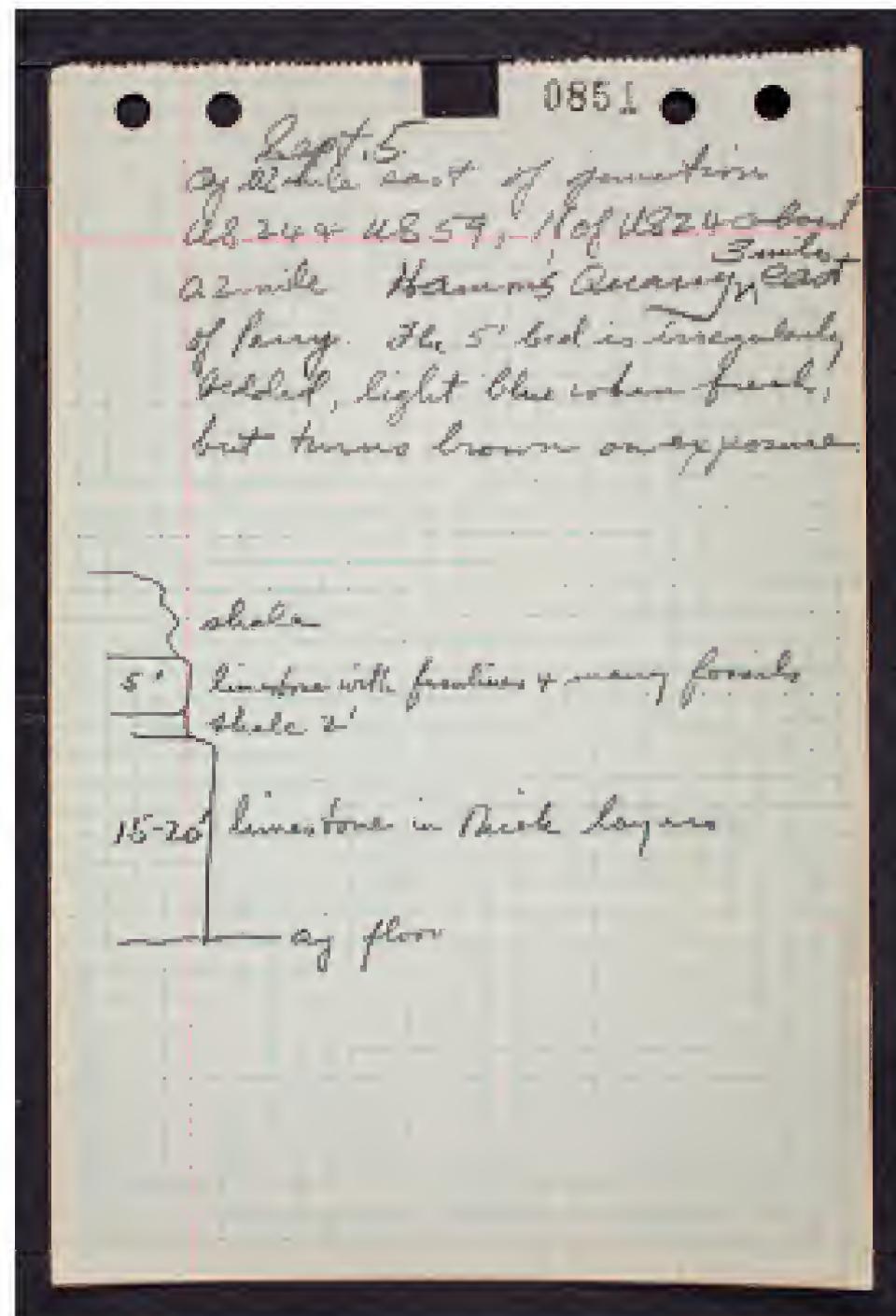
[[image: diagram of cross section of layers of soil]]

shale

5' limestone with fasulies & many fossils shale 2'

15-20' limestone in thick layers

Qy floor



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Sept 6

Letter to R.C.M. about treatise status, word from Williams, etc.

Moline (1 mi NE)

Borrow pit at [[insertion]] ^ Just W [[/insertion]] junction 99 & 160  
just N of RR just W estion  
11-31S-10E, Elk Co.

Check

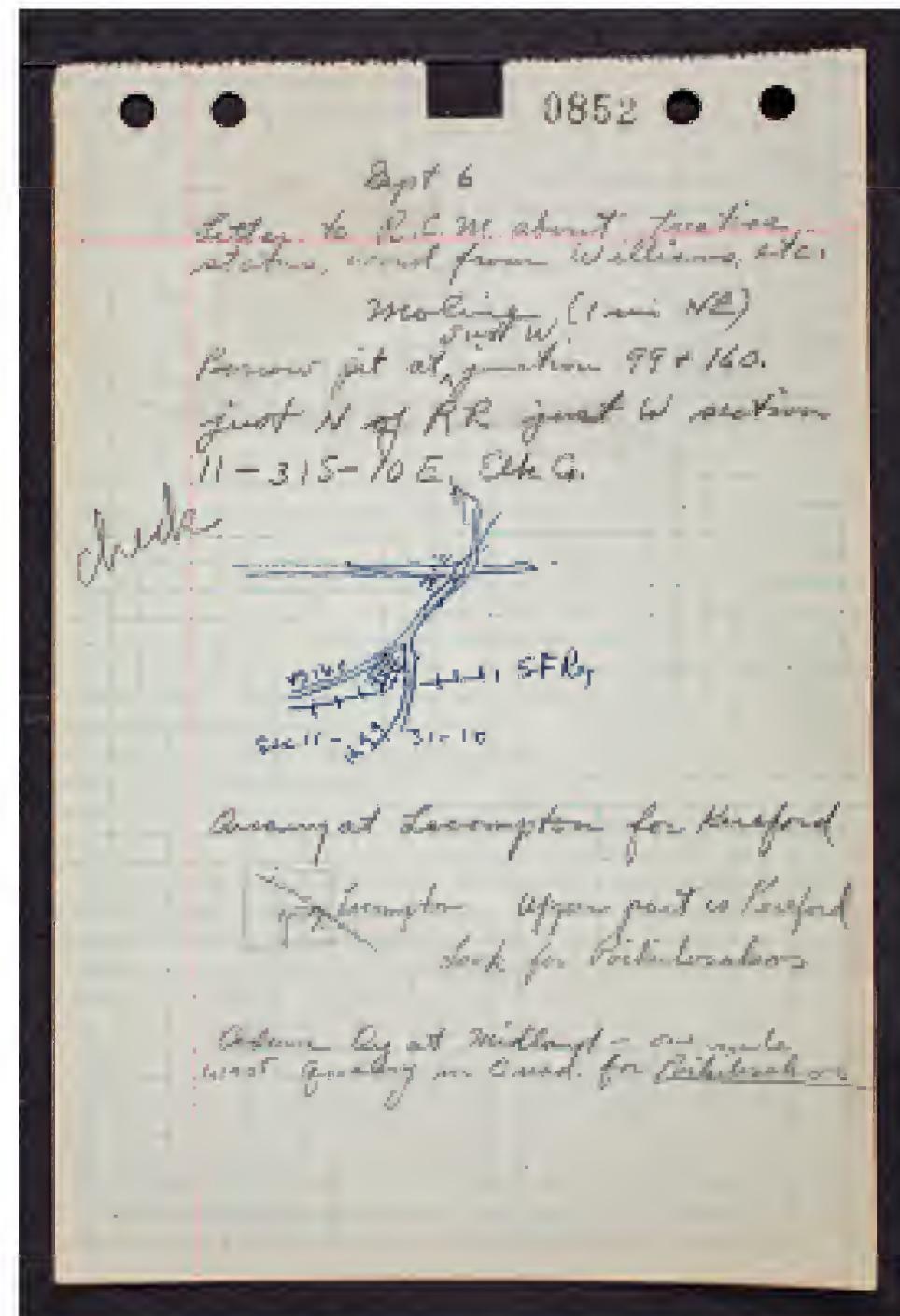
[[image: map]]  
[[map labels]]  
VS 160  
SFRy  
Sec 11 -  
K 99  
31-1-  
[[/map labels]]

Quarry at Leocompton for Kereford

[[image: map]]  
[[map label]] Leocompton [[/map label]]

Upper part is Kereford  
Look for Poikilosakos

Adams Qy at Midland - one mile west quarry in Oread. for [[underlined]]  
Poikilosobos [[/underlined]]



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North of Big Springs for Lecompton (Beil)

Big Springs, take road just E of B.S., go N 2 miles to school take road N of school, locality along RR to west

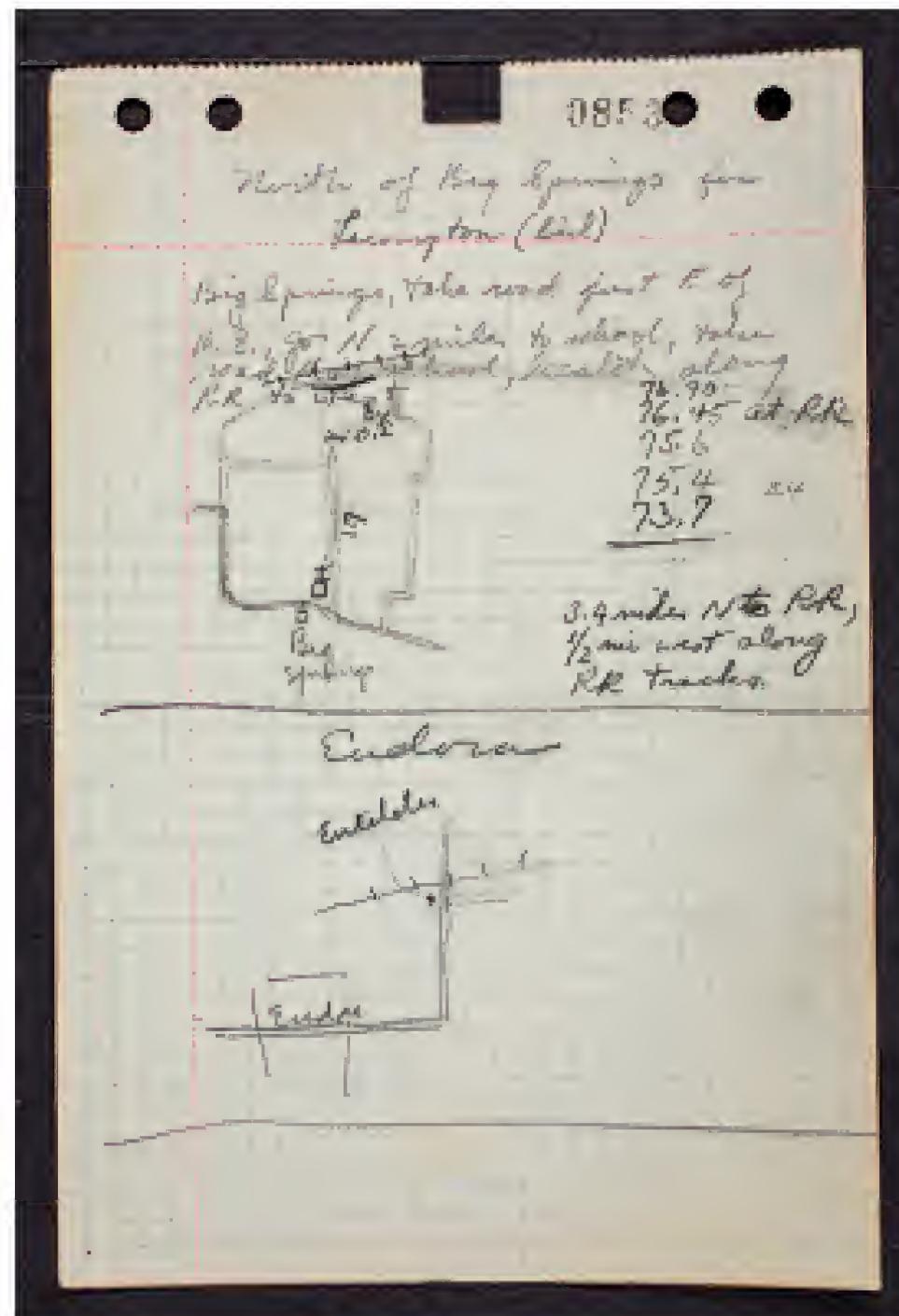
[[image: map of big springs with measurements, indications of property boundaries]]  
[[label]] Big Springs [[/label]]

76.90  
76.45 at RR  
75.6  
75.4  
73.7  
[[line]]

3.4 miles N to RR, 1/2 mi west along RR tracks  
[[line across page]]

Endora

[[image: map]]  
[[map labels]] Enteletes  
Endore [[/map labels]]  
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M.L. Stryker at Fredonia - Oil geologist Fredonia Qy in Stanton.

Chamite

Vilas - W of Chamite

1/2 mi E of Vilas, cut on RR

E of road crossing. Crossing of RR of hy 39

[[line across page]]

Just S of Humboldt, Qy in Iola

[[line across page]]

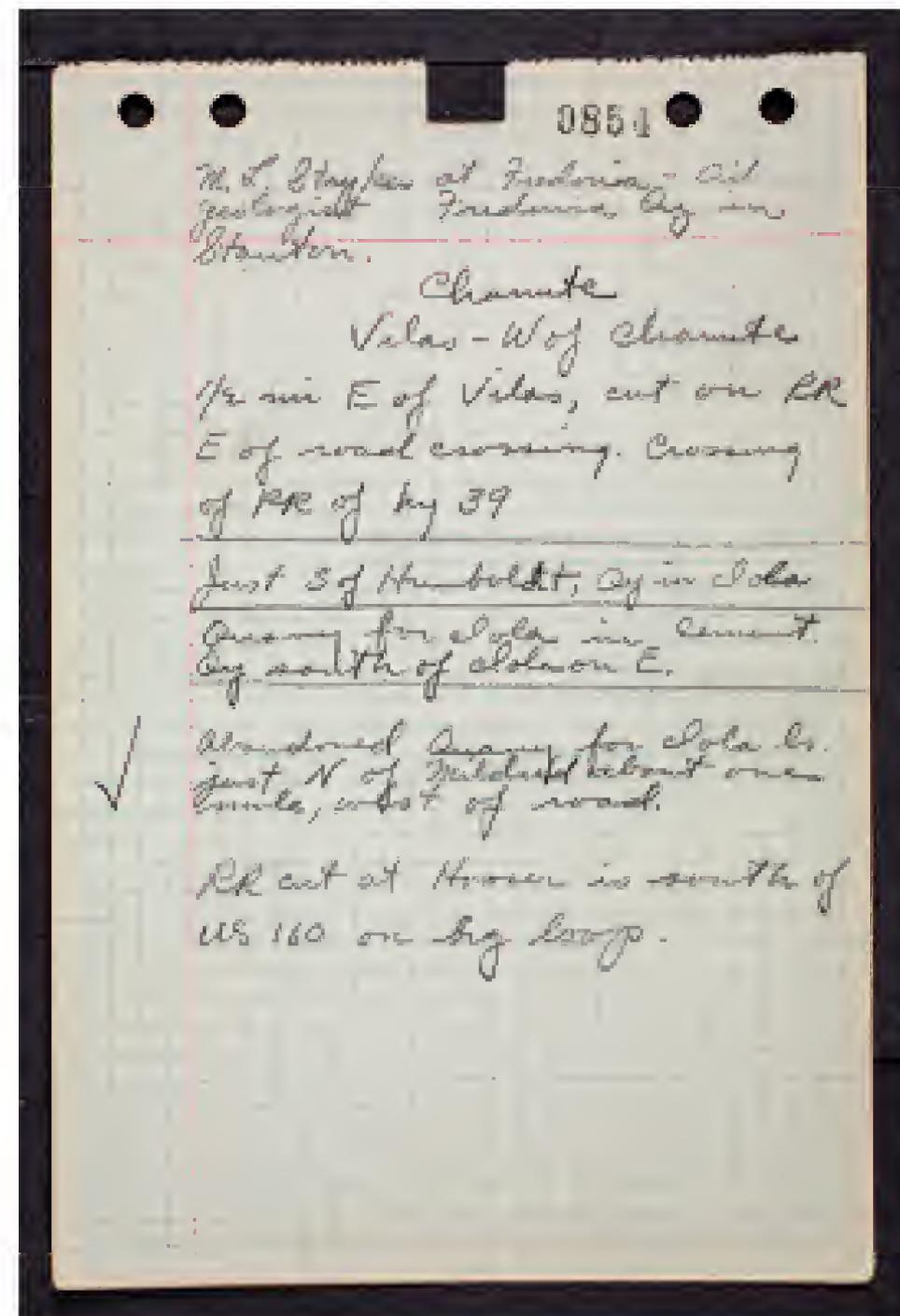
Quarry for Iola in Cement Qy south of Iola on E.

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Abandoned Quarry for Iola ls. just N of Mildred about one mile, west of road.

RR cut at Hooser is south of US 160 on big loop.



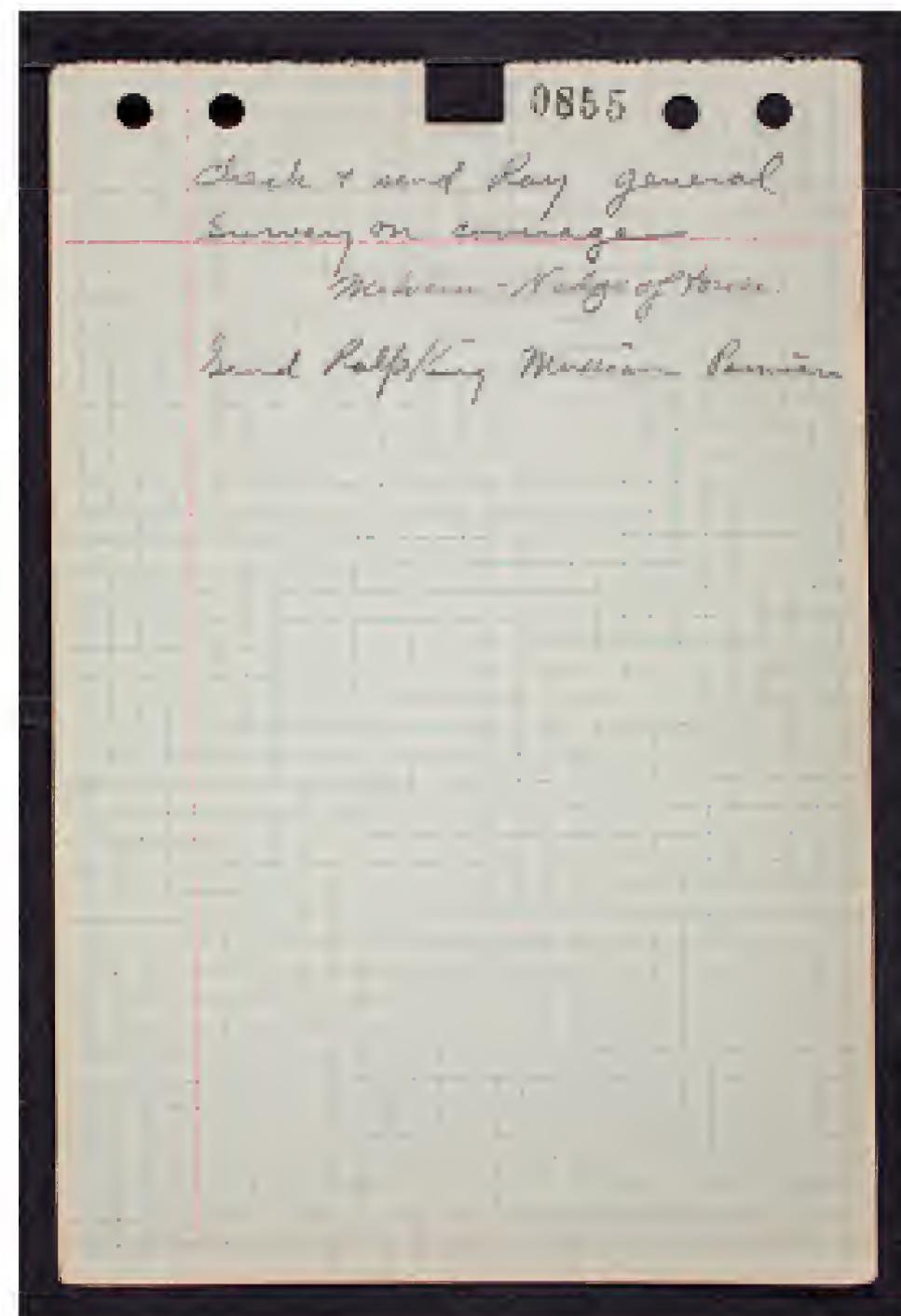
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Check & send Ray general survey on coverage

Melvern - N edge of town.

Send Ralpking Mexican Permian



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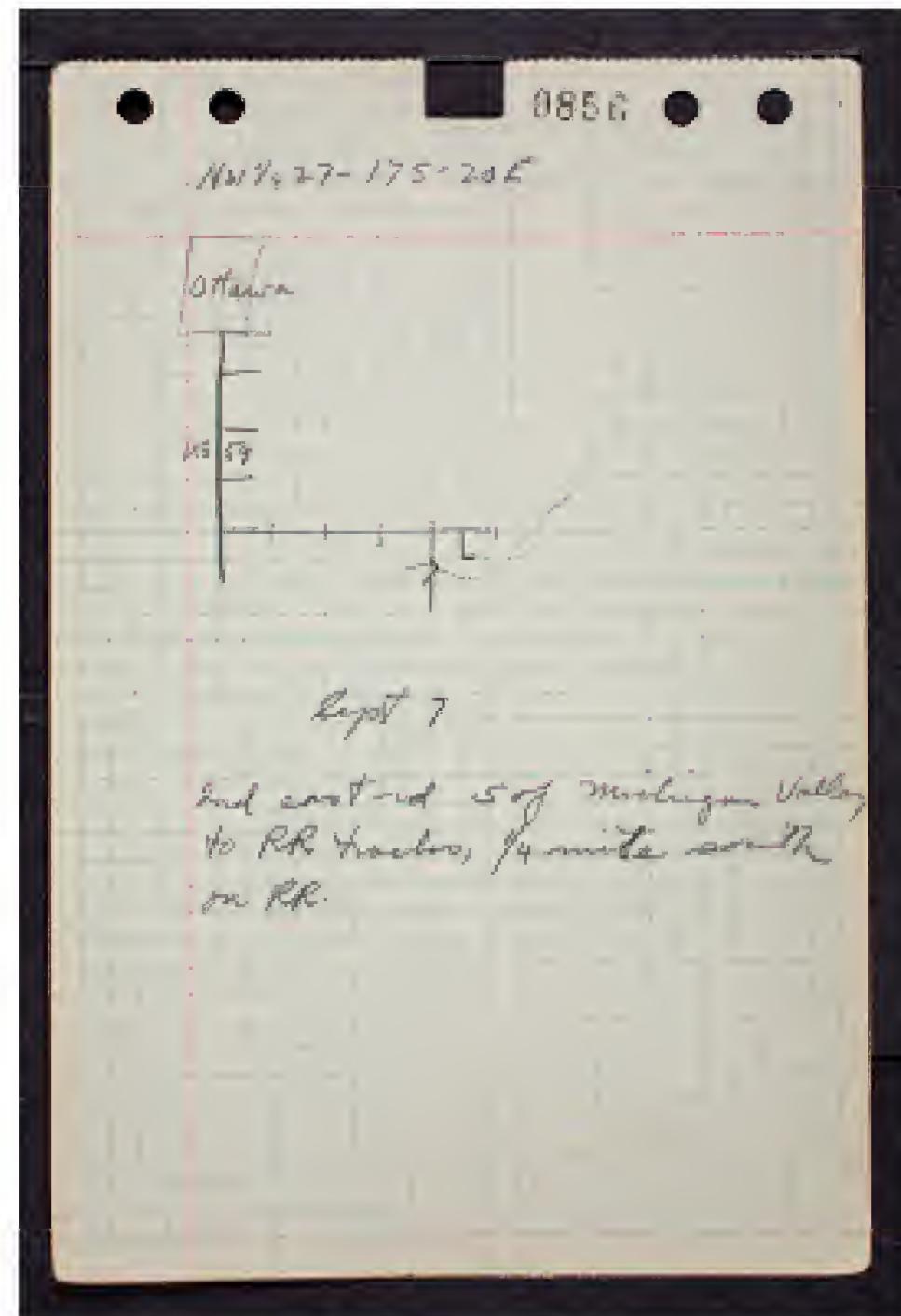
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NW 1/4 27-175-20E

[[diagram of map with Ottawa and US 59]]

Sept 7

2nd east rd S of Michigan Valley to RR tracks, 1/4 mile south on RR.



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Sept 9.

Along RR 3.5 mi N and 1/2 mi. W of Big Springs, Kansas.

[[image: pencil drawing of cross section of soil showing layers.]]

Avoca - limestone 3-4'.

King Hill Shale 7-8' gray

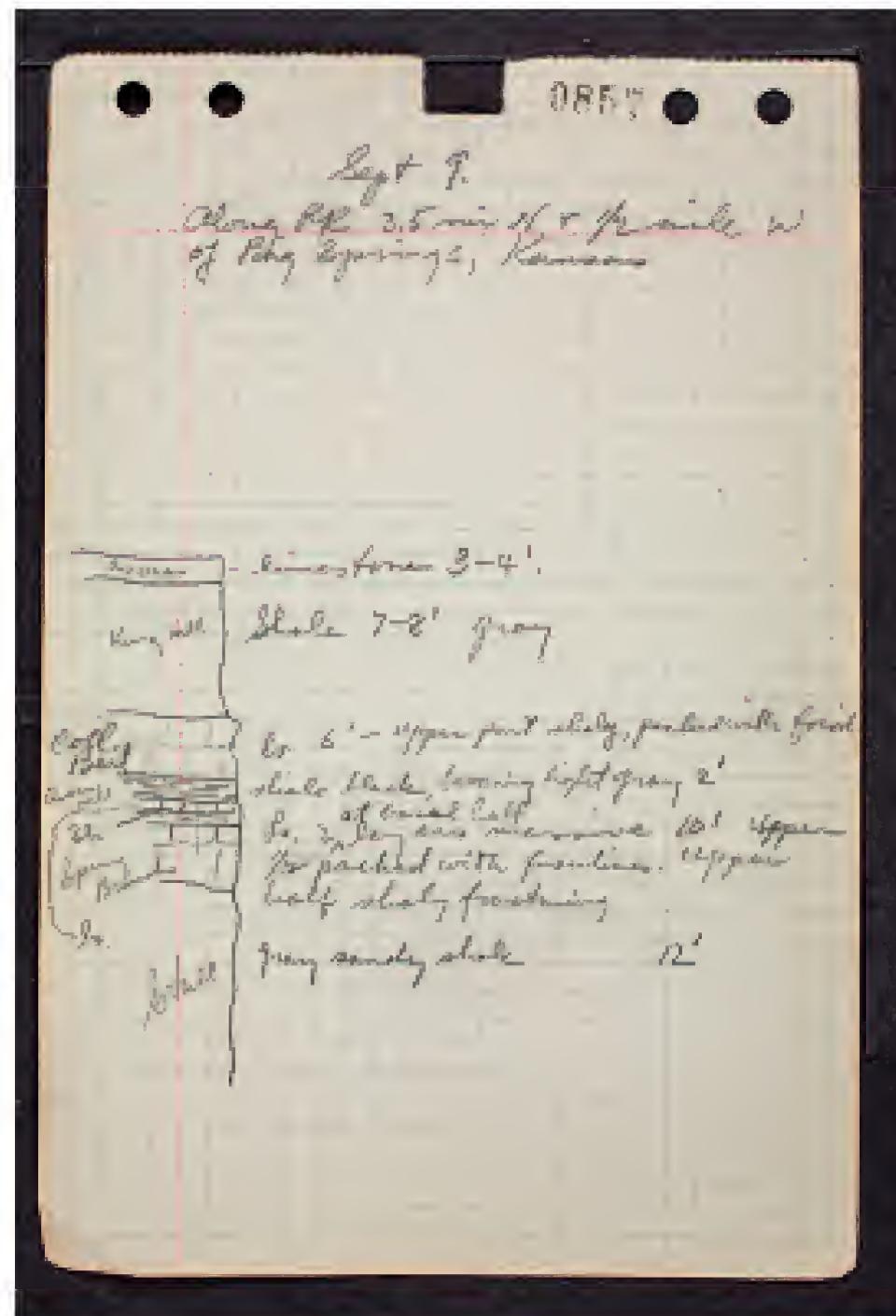
Coll. Beil ls. 6' - upper part shaly, packed with fossil

Queen Hill shale black, becoming light gray 2'

[[line indicating insertion]] ls. ls. 2 [[insertion]] at basal half [[/insertion]]  
layers massive 10' upper 1/2 packed with fusulines. Upper half shaly  
fracturing

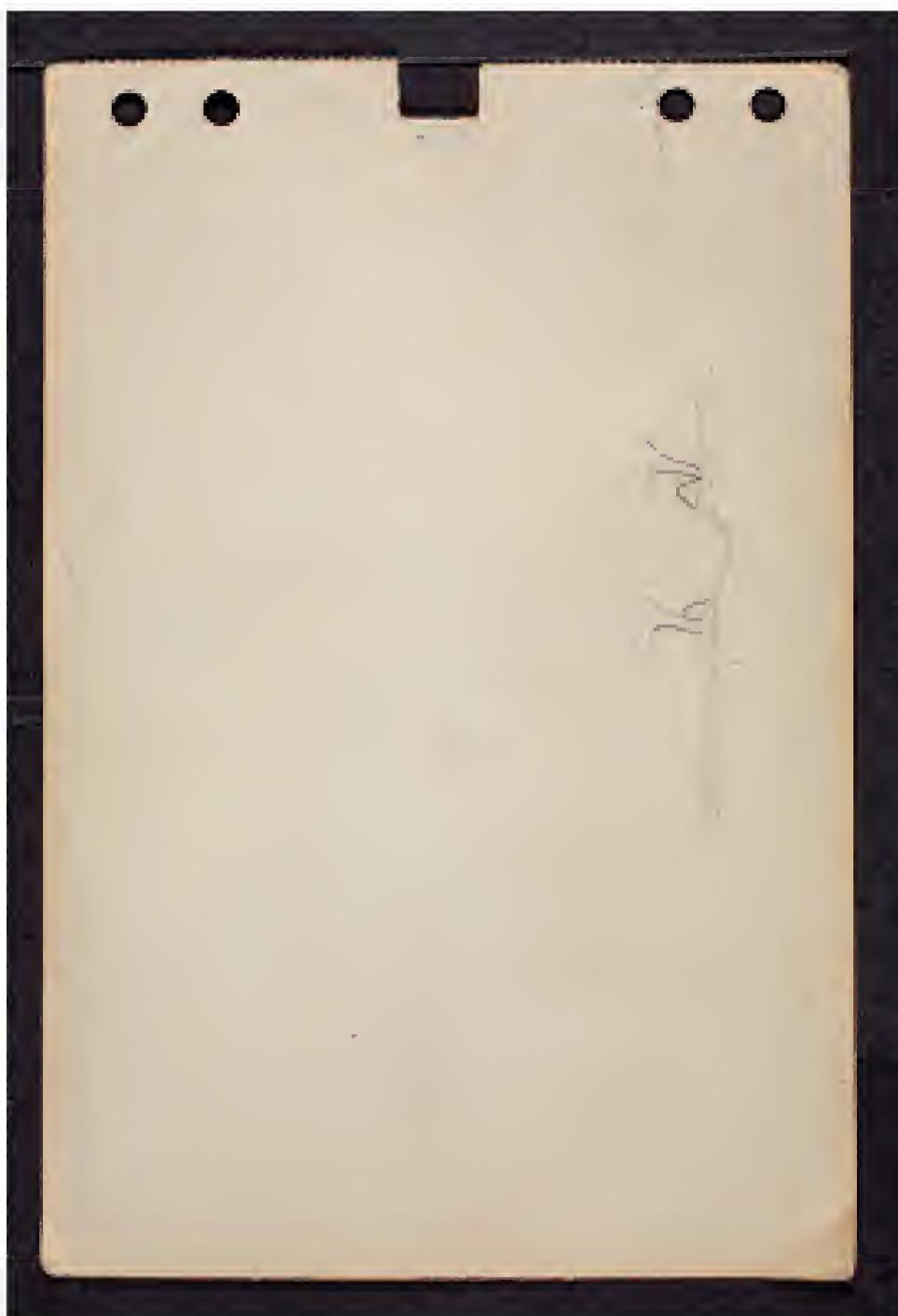
Sh.,  
Spring Branches

Stull Gray sandy shale 12'



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[[image of sketch]]



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May 12, 1955  
Hill east of Pompey Center on US 20

[[[image - a schematic showing layers]]]

Hard irregularly  
bedded ss. with 16'  
Tannomers near top  
of Delphi Station at bend of road

Crumbly but  
firmer than 38'  
below, many  
mollusks scattered  
in rock

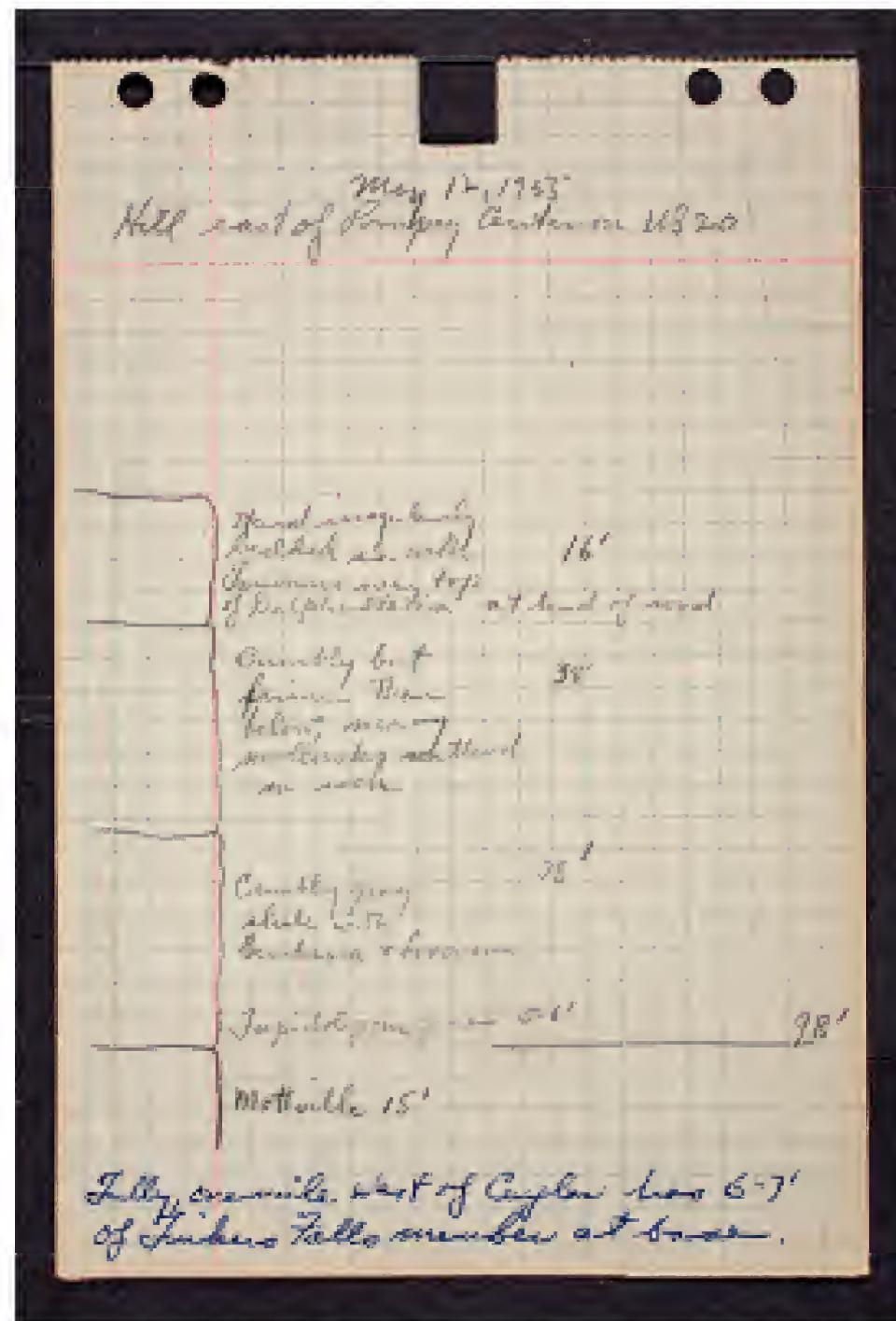
Crumbly gray 38'  
shale with  
Bembexia & Loxonema

Tropidoleptus zone 5-6'

[[[image - long horizontal line]]] 98'

Mottville 15'

Tully, one mile West of Cuyler has 6-7' of Tinkers Falls member at base.



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